

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLN. No.: 09/765,411

REMARKS

Claims 1-23 have been examined, and claims 24-42 have been withdrawn from further consideration in this Application.

Applicant thanks the Examiner for acknowledging Applicant's election of invention I in Paper No. 9

Applicant thanks the Examiner for acknowledging Applicant's claim for foreign priority under 35 U.S.C. § 119(a)-(d). Applicant also thanks the Examiner for acknowledging receipt of the certified copies of the priority documents filed on May 1, 2001 and for placing them in the record of the file.

Applicant also thanks the Examiner for considering the references listed on Form PTO-1449 submitted with the Information Disclosure Statements filed on May 1, 2001, September 10, 2001, and December 17, 2001. Applicant also thanks the Examiner for initialing and returning the Forms PTO-1449 and for placing them in the record of the file as Paper Nos. 4, 6, and 8.

The Examiner objects to the drawings. Applicant submits proposed drawing corrections for Figures 6, 13, 26C, 28C, and 32C showing Applicant's proposed corrections to overcome the objection. Applicant respectfully requests the Examiner to acknowledge receipt of these proposed drawing corrections and to approve them.

Rejection of Claim 1 Under § 102(e)

The Examiner rejects claim 1 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,030,074 to Barinaga. Applicant respectfully traverses this rejection.

One of the features of Applicant's invention as claimed in claim 1 is "an outer shell member constructed at least by a first outer shell constituent member and a second outer shell constituent member, said first outer shell constituent member having an opening and having a film hermetically sealed over said opening, said second outer shell constituent member being coupled to said first outer shell constituent member to cover said film". Barinaga does not disclose or suggest at least this feature as claimed.

In particular, Barinaga does not disclose a film sealed over an opening of the first outer shell constituent member. Assuming *arguendo* that the first outer shell constituent member and the second outer shell constituent member correspond respectively to the container 10 and the chassis 19 of Barinaga as the Examiner suggests, then Barinaga does not disclose a film sealed over and opening of the container 10 as required by the claim. The opening in of container 10 is hermetically sealed to the chassis 19 directly (Barinaga, column 3, lines 17-19). Barinaga does not disclose a film sealed over container 10, nor does it disclose that the chassis 19 is coupled to the container 10 to cover a film sealed over the opening of container 10.

Because Barinaga does not disclose this feature of claim 1, claim is not readable on (i.e. is not anticipated by) Barinaga at least for this reason.

Rejection of Claims 2-11 and 17-23 Under § 103(a)

The Examiner rejects claims 2-11 and 17-23 under 35 U.S.C. § 103(a) as being unpatentable over Barinaga in view of European Patent 0827836 A1 to Kobayashi et al.. Applicant respectfully traverses this rejection.

Claims 2-4 and 6-11 depend from base claim 1. As discussed above, Barinaga does not disclose or suggest all of the features of base claim 1. Kobayashi does not cure this deficiency in Barinaga with respect to claim 1.

Kobayashi discloses only one film that is described in the specification of Kobayashi as a re-releasable film 150 (Kobayashi, column 9, lines 56-58). In Kobayashi this film is attached to the upper cover 11, which, according to the Examiner, corresponds to the second outer shell constituent member of claim 1. This is in contrast to claim 1, which requires a "first outer shell constituent member having an opening and having a film hermetically sealed over said opening".

In addition, the seal 150 of Kobayashi is re-releasably attached to the surface of the upper cover, implying that the film is not hermetically sealed and can be easily removed. Because Kobayashi does not disclose a film as required by claim 1, Kobayashi does not supply at least

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this deficiency in Barinaga with respect to claim 1. Claims 2-4 and 6-11 would be allowable at least by virtue of their dependence from base claim 1.

With regard to claim 5, neither Barinaga nor Kobayashi either separately or in combination teach or suggest all of the features of Applicant's invention as claimed in claim 5. For example, one of the features of Applicant's invention as claimed in claim 5 is "reinforcement ribs are formed on surfaces of the first and second outer shell constituent members, the surfaces at least partially defining the pressure chamber". Neither Barinaga nor Kobayashi teach or suggest this feature as claimed.

The Examiner acknowledges that Barinaga does not teach or suggest this feature as claimed (Office Action, Page 5, paragraph 5). The Examiner alleges that Kobayashi teaches these reinforcement ribs as elements 112 and 124. Applicant respectfully disagrees.

First, elements 112 and 124 are not ribs, but rather portions of the legs of the upper cover and lower cover (Kobayashi, column 9, lines 24-27 and column 9, lines 47-53). Kobayashi discloses reinforcing ribs 117 in Figures 7 and 8, but these ribs are provided on the inner surface of the upper cover only. They are not "formed on surfaces of the first and second outer shell constituent members" as required by claim 5.

Because Kobayashi does not supply the deficiencies in Barinaga with respect to claim 5, claim 5 is patentable over these references for at least this reason.

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With respect to the rejection of claims 17-23, neither Barinaga nor Kobayashi either separately or in combination teach or suggest all of the features of Applicant's invention as claimed in base claim 17.

For example, one of the features of Applicant's invention as claimed in claim 17 is "at least one lug-shaped member which is formed on the second case and engages with the flange section, thereby coupling the first and second cases together, wherein said lug-shaped member protrudes inward from an inner surface of said circumferential portion". Neither Barinaga nor Kobayashi teach or suggest this feature as claimed.

The Examiner acknowledges that Barinaga does not teach or suggest this feature as claimed (Office Action, Page 5, paragraph 5). However, the Examiner alleges that Kobayashi teaches this lug-shaped member as element 15. Applicant respectfully disagrees.

In particular, element 15 is not formed on the second case as required by claim 17. Element 15 is a seal member, and it is formed separately from the upper cover 11 (Kobayashi, column 9, lines 17-20). In addition, seal member 15 does not engage with a "flange section formed along an edge of an opening of the first case" as required by the claim. Rather, the upper cover 11 merely abuts the cartridge frame 10 and covers seal member 15 (Kobayashi, column 9, lines 20-24). The engagement between the upper cover 11 and the cartridge frame 10 is provided by engaging legs 111 (Kobayashi, column 9, lines 24-33).

Because Kobayashi does not supply at least the deficiency in Barinaga with respect to this feature, Barinaga and Kobayashi considered separately or in combination do not teach or

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suggest the features of Applicant's invention as claimed in claim 17. Claims 18-23 are allowable at least by virtue of their dependence on base claim 17.

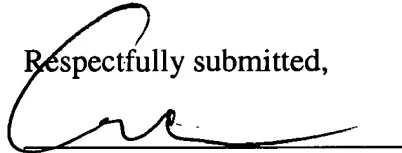
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

On page 29, the paragraph beginning at line 25:

“Fig. 7 is a cross-sectional view of the upper and lower cases when viewed from line A-
A900-900 shown in Fig. 6 in the direction designated by arrows;”

On page 30, the paragraph beginning at line 21:

“Fig. 14 is an enlarged cross-sectional view of the ink cartridge when viewed from line
~~B~~-B901-901 shown in Fig. 13 in the direction designated by arrows;”

On page 32, the paragraph beginning at line 14:

“Fig. 29 is a cross-sectional view of the construction of the ink cartridge taken along line
~~E~~-E904-904 shown in Fig. 28;”

On page 33, the paragraph beginning at line 3:

“Fig. 33 is a cross-sectional view of the construction of the ink cartridge taken along line
~~F~~-F905-905 shown in Fig. 32;”

On page 43, the paragraph beginning at line 19:

“Fig. 6 is a cross-sectional view showing a state in which the upper case 51 is fixed to the
lower case 41 by vibratory welding, and Fig. 7 is a cross-sectional view taken along an arrow

line ~~A-A~~900-900 shown in Fig. 6. In Figs. 6 and 7, elements identical with those which have already been described are assigned the same reference numerals.”

On page 56, the paragraph beginning at line 13:

“An ink cartridge according to a third embodiment of the present invention will now be described. Figs. 13 through 15 show an ink cartridge (main tank) 100 according to the third embodiment of the present invention. Fig. 13 is a perspective view showing the entire construction of a main tank. Fig. 14 is an enlarged cross-sectional view of the ink cartridge when viewed from line 901-901 ~~B-B~~ shown in Fig. 13 in the direction designated by arrows. Fig. 15 is a perspective view showing the construction of an ink pack 124 housed in an outer shell case shown in Fig. 13.”

On page 69, the paragraph beginning at line 19:

“Figs. 25 and 26 show the construction of the press member 143, and Fig. 25 is a perspective view showing the entirety of a press member. Fig. 26A is a front view showing the press member; Fig. 26B is a cross-sectional view of the press member when viewed from line ~~C-C~~902-902 shown in Fig. 26A in the direction designated by arrows; and Fig. 26C is a cross-sectional view of the press member when viewed from line ~~D-D~~903-903 shown in Fig. 26A in the direction designated by arrows.”

On page 77, the paragraph beginning at line 12:

Fig. 29 is a cross-sectional view showing the structure of the case taken along line ~~E-E~~904-904 shown in Fig. 28C. Indentations 204a are formed in ribs 204 provided on the case

main body 202 so as to match the cross section of a pillow-shaped ink pack 201 filled with ink 207. Similarly, indentations 204a' are formed in ribs 204' provided on the cover 203 so as to match the same. The peripheral edges 201b and 201d of the ink pack 201 are sandwiched between end sections 204b and 204b' of the ribs 204 and 204'.

On page 81, the paragraph beginning at line 17:

"Fig. 33 is a cross-sectional view showing the structure of the case taken along line F-F905-905 shown in Fig. 32C. The raised sections 204 are formed on the case main body 202 so as to match the cross section of a pillow-shaped ink pack 201 filled with the ink 207. Similarly, the raised sections 204' are formed on the cover 203 so as to match the same. The peripheral edges 201b and 201d of the ink pack 201 are sandwiched between the mutually-opposing end sections 204b and 204b'."

IN THE CLAIMS:

Claims 24-42 are canceled.

The claims are amended as follows:

1. (Amended) An ink cartridge for use with a recording apparatus which supplies ink to a recording head by application of pressurized air produced by an air pressurization pump, the ink cartridge comprising:

an outer shell member constructed at least by a first outer shell constituent member and a second outer shell constituent member, said first outer shell constituent member having an opening and having a film hermetically sealed over said opening, said second outer shell

constituent member that being are hermetically coupled to said first outer shell constituent member to cover said film together;

an ink pack of flexible material storing ink therein, the ink pack being housed within the outer shell; and

a pressure chamber defined between the outer shell member and the ink pack and adapted to receive the pressurized air produced by the air pressurization pump.

5. (Amended) An ink cartridge for use with a recording apparatus which supplies ink to a recording head by application of pressurized air produced by an air pressurization pump, the ink cartridge comprising:

an outer shell member constructed at least by a first outer shell constituent member and a second outer shell constituent member that are hermetically coupled together;

an ink pack of flexible material storing ink therein, the ink pack being housed within the outer shell; and

a pressure chamber defined between the outer shell member and the ink pack and adapted to receive the pressurized air produced by the air pressurization pump~~The ink cartridge according to any one of claims 1 through 4, wherein reinforcement ribs are formed on surfaces of the first and second outer shell constituent members, the surfaces at least partially defining the pressure chamber.~~

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17. (Amended) An ink cartridge for use with a recording apparatus, including: an ink pack of flexible material storing ink therein, and a cartridge case hermetically formed for housing the ink pack, wherein, when the ink cartridge is mounted to a recording apparatus, pressurized air is introduced into the cartridge case, the ink cartridge comprising:

first and second cases which constitute the cartridge case, said second case having a circumferential portion;

a flange section formed along an edge of an opening of the first case, wherein said circumferential portion of said second case covers said flange section; and

at least one lug-shaped member which is formed on the second case and engages with the flange section, thereby coupling the first and second cases together, wherein said lug-shaped member protrudes inward from an inner surface of said circumferential portion.

New claims 43-53 are added.